# Appendix A

# **Relevant Forest Plan Standards and Guidelines**

#### Roads

# 1990 Forest Plan p. 4-7

- **1.** Build and Maintain transportation system facilities to the minimum standards needed to support planned uses and activities.
- **2.** Manage the transportation system at a minimum standard necessary to provide for public safety.

# **Chapter 4 Standards and Guidelines p. 4-140**

#### **Facilities**

**Goal:** Provide and manage roads, facilities, and utility systems required to protect and manage the Mt Baker-Snoqualmie National Forest.

**Construction**. Roads will be designed, constructed, and/or reconstructed according to standards appropriate to planned uses, activities, safety, economics, and impacts on lands and resources using criteria in FSM 7700 and 7720 or as revised.

# **Operations and Maintenance.**

- **a.** Operate, maintain, and/or close roads to meet established road management objectives and safety.
- **d.** Develop and implement projects to correct road related water quality, anadromous fish habitat, and other resource problems.

# 1994 Forest Plan, as Amended, Record of Decision p. C-32,C-33

- **RF -2** For each existing or planned road, meet Aquatic Conservation Strategy objectives.
  - **c.** preparing road design criteria, elements, and standards that govern construction and reconstruction.
  - **d.** preparing operation and maintenance criteria that govern road operation, maintenance, and management.

- **e.** minimizing disruption of natural hydrologic flow paths, including diversion of streamflow and interception of surface and subsurface flow.
- **f.** restricting sidecasting as necessary to prevent the introduction of sediment to streams.
- **RF-3.** Determine the influence of each road on the Aquatic Conservation Strategy objectives through watershed analysis. Meet Aquatic Conservation Strategy objectives by:
  - a. reconstructing roads and associated drainage features that pose a substantial risk.
  - **b.** prioritizing reconstruction based on current and potential impact to riparian resources and the ecological value of the riparian resources affected.
  - **c.** closing and stabilizing, or obliterating and stabilizing roads based on the ongoing and potential effects to Aquatic Conservation Strategy objectives and considering short-term and long term transportation needs.
- **RF-4.** New culverts, bridges and other steam crossings shall be constructed, and existing culverts, bridges and other stream crossings determined to pose a substantial risk to riparian conditions will be improved, to accommodate at least the 100-year flood, including associated bedload and debris. Priority for upgrading will be based on the potential impacts and the ecological value of the riparian resources affected. Crossings will be constructed and maintain to prevent diversion of stream flow out of the channel and down the road in the event of crossing failure.
- **RF-5.** Minimize sediment delivery to streams from roads. Outsloping of the roadway surface is preferred, except in cases where outsloping would increase sediment delivery to streams of where outsloping is unfeasible or unsafe. Route road drainage away from potentially unstable channels, fills, and hillslopes.
- **RF-6.** Provide and maintain fish passage at all road crossings of existing and potential fish-bearing streams.

#### **Recreation LRMP**

Recreation Trails Overall Objective – To provide on a Forest-wide basis (not necessarily on each Ranger District) a broad spectrum of trail travel opportunities including: trails at various elevations, trails in diverse settings, and trails suitable to various kinds of users and modes of travel (LRMP pp. 4-86 to 4-91).

- Trails 1 A broad spectrum of trails will be provided, varying in degree of ease and convenience. Trails will meet the primary objective and difficulty level standards.
- Trails 12 Only system trails are considered safe for use. Only system trails will be signed on the ground and shown on maps.

- Trails in Roaded Areas 3e Abandoned or closed portions of the road system will be considered for management as trails.
- Trailhead Policy 7 A trailhead is a place where a trail connects with a road or navigable body of water. Trailheads are part of the transportation system and will be developed and maintained with Forest Roads Program funds. As a minimum, a trailhead will provide adequate parking for an average peak season weekend day's use.

Wilderness – Feature naturalness, provide opportunities for solitude, challenge, and inspiration, and within these constraints to allow for recreational, scenic, scientific, educational, conservation, and historical uses (LRMP p. 4-101).

• Wilderness – Provides unique and highly favored recreational experiences, however, recreational use of wilderness must be closely managed and monitored to assure that degradation of resource values does not occur.

Manage use within the limits of acceptable change for the wilderness class.

#### **Northwest Forest Plan**

# Recreation Management:

- RM-1. New recreational facilities within Riparian Reserves, including trails and dispersed sites, should be designed to not prevent meeting Aquatic Conservation Strategy objectives. Construction of these facilities should not prevent future attainment of these objectives. For existing recreation facilities within Riparian Reserves, evaluate and mitigate impact to ensure that these do not prevent, and to the extent practicable contribute to, attainment of Aquatic Conservation Strategy objectives. (p. C-34)
- RM-2. Adjust dispersed and developed recreation practices that retard or prevent attainment of Aquatic Conservation Strategy objectives. Where adjustment measures such as education, use limitations, traffic control devices, increased maintenance, relocation of facilities, and/or specific site closures are not effective, eliminate the practice or occupancy.

#### Wildlfie

## LRMP p. 4-3

- Maintain the vitality, distribution, and abundance of animal populations. At a minimum, maintain viable populations of existing native and desired non-native vertebrate species on National Forest lands. No species should be eliminated from an area. Maintain the long-term productivity of wildlife habitats.
- Identify Threatened, Endangered, and Sensitive plant and animal species habitat. Protect, maintain, and/or enhance this habitat in accordance with Recovery plans. The overall goal is to prevent the Federal listing of Sensitive species and/or to pursue the delisting of Federally listed species.

• Manage for the highest levels of populations of indicator species and other desired wildlife appropriate to an area and compatible with the Management Area allocation.

# LRMP p. 4-4

• Maintain native and desirable non-native plant and animal species and communities.

## LRMP p. 4-127

- All proposed management actions that have the potential to affect habitat of endangered, threatened, or sensitive species will be evaluated to determine if any of those species are present.
- When sensitive species are present, a Biological Evaluation shall be completed as
  described in Forest Service Manual 2670. Habitat for sensitive plants and animals shall
  be managed to ensure that management activities do not contribute to these species
  becoming threatened or endangered.

## Northwest Forest Plan C-16

• Leave felled trees along road rights-of-way when coarse woody debris is inadequate.

## Northwest Forest Plan C-17

• Development of new facilities that may adversely affect Late-successional Reserves should not be permitted. Developments will be located to avoid degradation of habitat and adverse effects on late-successional species.

## Fisheries, Hydrology, and Soils

#### 1990 LRMP

#### Soil Resource

- Plan and conduct Land Management activities so that reductions of soil productivity potentially caused by detrimental compaction, displacement, puddling and severe burning are minimized.
- Plan and conduct Land Management activities so that soil loss from surface erosion and mass wasting, caused by these activities, will not result in an unacceptable reduction in soil productivity and water quality (as stated in FSM 2500 R-6 Supp. 45 or as revised). (p. 4-117)
- No more than 20% of an activity area may be severely burned compacted, puddled, or displaced as a result of the activity. Only permanent features of the transportation system will remain in a detrimentally compacted, puddled, and/or displaced condition. (p. 4-117)
- Plan and accomplish rehabilitation projects as necessary to meet soil and water objectives and standards. (p. 4-117)
- Areas classified as irreversible soils (S-8) will generally be considered as unavailable for road construction and timber harvest.

## Water Resources and Riparian Areas

- Meet or exceed Water Quality Regulations for waters of the State (Washington Administrative Code, Chapter 173-201) through application of Best Management Practices. The key beneficial uses which BMP's are designed to protect are fish and water for domestic use. (p. 4-118)
- Maintain the bank, floodplain, and shore stability of all wetlands, streams, lakes, and other bodies of water. Implicit in this standard are actions to prevent all forms of accelerated soil erosion and soil compaction, and the retention of the live root mat to the maximum practicable extent. (p. 4-119)
- Maintain in-channel and streambank stability maintained for upper and lower channels in the Forest watersheds in order to provide stable, high-quality habitat for salmon and trout, and provide high quality water for other in-stream beneficial uses. (p. 4-119)
- Maintain pool conditions in both upper and lower channels in the Forest watersheds to: (1) provide high quality habitat for salmon and trout, and (2) provide in-stream flow regulation. (p. 4-119)
- Along perennial streams and fish bearing intermittent streams, vegetation should be maintained to provide cover and/or root strength so as to maintain streambank stability and fish habitat capability at existing levels. (p. 4-119)
- Consult with a hydrologist if the activity being planned involves riparian areas, wetlands, floodplains, or probable cumulative impacts on water resources. (p. 4-120)

# Riparian Areas (p. 4-226)

- Transportation System Planning
  - o Roads should avoid riparian areas when possible. Locating roads in a riparian area can only be done if riparian values are protected
  - Necessary crossings should use methods that minimize adverse impacts to water and fisheries resources
- Road Construction, Reconstruction and Operation
  - Road construction/reconstruction activities will be permitted in designated riparian areas only when stated riparian area objectives can be accomplished. Such activities may be restricted to timing and/or access due to fish migration and/or spawning
  - Slopes adjacent to or within riparian areas will be protected with erosion control and/or sediment control. Before the first wet season, vegetation or slope protection will be completed. Prior to the end of normal operating season, final stabilization practices should include vegetation as well as structural.
  - Water quality and/or fisheries habitat problems caused by road construction/reconstruction shall be fully mitigated in kind, on site.
  - All roads not receiving annual maintenance shall have measures to control road surface and ditch water.

#### **Fire and Fuels**

#### 1990 LRMP

- 4-142 Fire; Goals: Provide and execute a fire protection and fire use program that is cost efficient and responsive to land and resource management goals and objectives.
  - 1. All wildfire will receive an appropriate suppression response utilizing a strategy of confine, contain, or control.
  - 2. Wildfires that threaten live, property, public safety, improvements, or investments will receive aggressive suppression action using a control strategy.
- 4-144 Fire Management Direction; Group B (10C: Wilderness General Trailless):

Fire Suppression Direction: All wildfires will receive appropriate suppression action. Contain or control strategies will be used when wildfires threaten identified cultural sites or improvements or has the potential to leave the wilderness area and result in unacceptable damages. A confine strategy will be used elsewhere.

Operational Constraints: Containment or control actions will be in accordance with wilderness suppression guidelines (FSM). Indirect attack utilizing natural barriers and changes in vegetation and topography will be utilized whenever possible. All actions will minimize disturbance to vegetation and soil. Helicopters may be utilized if they are the most cost efficient method of accomplishing the job. Natural openings will be utilized as helispots whenever possible. Clearing will be held to a minimum. Power saws and other mechanized equipment will be used only after Forest Supervisor approval. Air tankers will be used only on wildfires which threaten non-wilderness values. Mop-up will be limited to that necessary to maintain the integrity of contain or control objectives when applied.

4-145 Fire Management Direction; Group C (1B Dispersed Recreation-Semi-primitive Nonmotorized):

Fire Suppression Direction: Appropriate suppression action will be taken on all wildfires within the area this allocation applies. The contain or control strategy will be utilized when wildfires threaten cultural resources, capital investments, or other areas with more constrained fire management direction.

Operational Constraints: Economic efficiency rather than a specified acreage constraint will control the intensity of fire suppression efforts. The full range of suppression tactics and tools are available, though those with the least imact on the ground are preferred. Contain or control actions will be taken on any fire which has the potential to exceed the annual maximum allowable (150 acres per year forest wide on an average basis) burned

acreage for this allocation. Mop-up actions will be consistent with insuring success of contain or control actions where deployed.

4-146 Fire Management Direction; Group D (5ALSR: Recommended Recreation River):

Fire Suppression Direction: Control all wildfires at 5 acres or less.

Operational Constraints: Avoid the use of ground disturbing equipment within 100 ft of water courses. Avoid the use of retardant within 200 ft of water courses. Firelines should be located away from stream courses. If possible maintain at least 50 ft between the stream course and firelines. Tactics which maintain the greatest proportion of riparian vegetation are preferred. Mop-up should be aggressive and directed at retaining as much riparian vegetation as possible.

4-147 Fire Management Direction; Group E(1) (14: Deer and Elk Winter Range; 15ALSR: Mountain Goat Habitat-Management Requirements; and 19 & 19LSR: Mountain Hemlock Zone):

Fire Suppression Direction: Suppress all wildfires at 50 acres or less using the most cost efficient suppression tactics. An exception to this would be in those areas where this allocation abuts one with a more stringent objective or when private land boundaries are threatened. In these situations, a 10 acre control objective is appropriate.

Operational Constraints: Direct attack will normally be used under Fire intensity Level (FIL) 1 and 2 conditions and indirect attack methods used under FIL 3+. Mop-up will be of sufficient intensity to maintain the control integrity. The full range of suppression techniques is available.

4-148 Fire Management Direction; Group E(2) (17: Timber Management Emphasis-Second Growth Stands):

Fire Suppression Direction: Suppress all wildfires at 25 acres or less using the most cost efficient suppression tactics. An exception to this would be in those areas where this allocation abuts one with a more stringent objective or when private land boundaries are threatened. In these situations, a 10 acre control objective is appropriate.

Operational Constraints: Direct attack will normally be used under Fire intensity Level (FIL) 1 and 2 conditions and indirect attack methods used under FIL 3+. Mop-up will be of sufficient intensity to maintain the control integrity. A full range of suppression techniques is available.

# **Northwest Forest Plan**

C-17 Late Successional Reserve; Standards and Guidelines; Fire Suppression and Prevention: In Riparian and Late-Successional Reserves, the goal of wildfire suppression is to limit the size of

all fires...Rapidly extinguishing smoldering coarse woody debris and duff should be considered to preserve these ecosystem elements.

## **Rare and Invasive Plants**

#### 1990 LRMP

p. 4-127: Habitat for Sensitive plants and animals shall be managed to ensure that management activities do not contribute to these species becoming threatened or endangered.

Forest Plan Amendment #26. In decommissioning projects, existing infestations should be treated before the road is made undrivable to avoid the spread of weeds during road decommissioning.

Forest Plan Amendment #26. If weeds are present in the project area, all equipment and gear should be cleaned before leaving the area to avoid spreading the infestation further.

# 2005 Region Six Record of Decision for Preventing and Managing Invasive Plants

Standard 2: Actions conducted or authorized by the Forest Service that will operate outside the limits of the road prism require the cleaning of all heavy equipment prior to entering National Forest system lands.

Standard 3: Use weed-free straw and mulch for all projects on National Forest System lands.

Standard 7: Inspect active gravel, fill, and stockpiles, quarry sites, and borrow materials for invasive plants before use and transport. Treat or require treatment of infested source before any use of pit material. Use only gravel, fill, sand, and rock this is judged to be weed free by District or Forest weed specialists.

Standard 13, and Forest Service Manual 2070.3: Native plant materials are the first choice in revegetation for restoration and rehabilitation where timely natural regeneration of the native plant community is not likely to occur.

#### Wild and Scenic Rivers

#### 1990 LRMP

- Maintain or enhance the recreation, visual, wildlife, fisheries and water quality values of the existing and recommended wild, scenic, and recreation rivers.
- Recommended wild and scenic rivers shall be managed to protect those characteristics that contribute to the eligibility of these rivers at their highest potential classification until Congress formally determines their status. (p. 4-95).
- Protect from degradation the outstanding remarkable wild, scenic and recreation characteristics of recommended rivers and their environment, pending a decision on inclusion into the National System (p. 4-189).